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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,187	04/26/2001	Thomas M. Baer	14255-034001 / ARCOI-2001	2124
26161	7590	06/13/2008	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			LUDLOW, JAN M	
			ART UNIT	PAPER NUMBER
			1797	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/844,187

Applicant(s)

BAER ET AL.

Examiner

Jan M. Ludlow

Art Unit

1797

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13,79-82 and 93-109 is/are pending in the application.
- 4a) Of the above claim(s) 5-13,79-82,93-99,101-103 and 105-108 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,100,104 and 109 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 27, 2008 has been entered.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 100, 109 are rejected under 35 U.S.C. 103(a) as being obvious over Ito (5063025) in view of Golias (4,341,635).

Ito teaches a carrier 14 with bottom surface near 13a in extraction device 11, 12 that is open at both ends and forms a reservoir. See Figure 1. When the carrier 14 is fully depressed, the edges of the bottom of 13a abut the ends of tube 11, excluding the edges of 13a from the reservoir in 12. A volume of 5 microliters is disclosed (col. 1, line 30). It is the examiner's position that the carrier inherently seals the first opening in that the device would not function as a syringe if no seal were present. See also Figure 7 for an alternative prior art embodiment. With respect to adaptation for mating, the device is structurally capable of mating with another vessel of suitable size and configuration. The raised land portion is the end surface tube 12 within tube 11 which contacts the surface of carrier 14 when 14 is fully depressed and is raised relative to the distal end of tube 11 when the device is held in an upright position.

Ito fails to teach a shoulder and flange at the first end.

It would have been obvious to provide a flange on the upper end of the syringe body of Ito (instant extraction vessel) in order to provide a gripping surface as taught by Golias.

It would have been obvious to provide a gripper on the upper end of the syringe body of Ito (instant extraction vessel) in order to provide a gripping surface as taught by Golias.

5. Claims 100, 104, 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO99/17094 (hereafter "WO") and further in view of Silverstolpe (2,649,245).

WO teaches a carrier 1120 with film 1130 and rim 1150 which contacts the sample, but not the interior of extraction device 1110, because it seals against shoulder 1140, permitting specifically bound cells in the center of the film to communicate with the vessel reservoir and non-specifically bound cells clinging to the ridge to be excluded from the reservoir (pp. 20-21, Figure 11A-D). The extraction device has a top opening for receiving the carrier and a conduit (passageway) leading to the second (bottom) end. Shoulder 1140 constitutes the instant raised landing portion. Although the raised landing portion 1140 has a slightly angled surface, it is the examiner's position that because it is intended to mate with a flat annular region of the carrier 1120, it would have been obvious to make the shoulder flat at the top in order to make a simple flat-surface-to-flat-surface abutment seal in view of a common sense understanding of how surfaces contact one another.

6. WO fails to teach an opening in the second end or the flange.

7. Silverstolpe teaches a centrifuge tube having a cylindrical upper portion and tapered bottom portion (Fig. 1) similar to the vessel of WO. The bottom end of the tube has an opening that is closed by a stopper 11 for accessing the bottom end of the tube. The top of the tube may be provided with a flange 20.

8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the tube of WO with an open bottom end in order to withdraw concentrated fluids or solids from the bottom of the tube as taught by

Silverstolpe. It would have been obvious to provide a flange on the microcentrifuge tube of WO in order to provide the flange of Silverstolpe, which one of ordinary skill would understand provides a gripping surface and/or a stop surface for insertion into a rack or the like. With respect to claim 2, it would have been obvious to make the vessel of suitable size to handle very small samples in order to minimize the use and disposal of costly and/or hazardous reagents. With respect to adaptation for mating, the device is structurally capable of mating with another vessel of suitable size and configuration.

9. Claims 1-2, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO and Silverstolpe as applied to claims 100, 104, 109 above, and further in view of Rahm (4310488) and/or Pates (3799426).

10. The primary references fail to teach the outward shoulder between the ends and the flange extending to the first end.

11. Rahm (element 11) and Pates (element 14) each teach tubes similar to WO and Silverstolpe. The flange of Silverstolpe is provided between the top and bottom of the tube, constituting the instant shoulder, and the portion of the tube above the shoulder constitutes the at least one flange.

12. It would have been obvious to position the outwardly projecting shoulder of Silverstolpe on the tube of WO at a lower position in order to support the tube in a rack in a raised position for further processing as taught by Rahm and/or Pates.

13. Applicant's arguments filed March 27, 2008 have been fully considered but they are not persuasive.

Applicant argues that Ito does not teach a raised landing portion, but the raised landing portion is the end surface tube 12 within tube 11 which contacts the surface of carrier 14 when 14 is fully depressed and is raised relative to the distal end of tube 11 when the device is held in an upright position.

Applicant argues that WO (Baer) teaches neither a shoulder and flange as claimed nor a raised landing portion, but Baer teaches a raised landing portion 1140, and Rahm and Pates are relied upon for the placement of the flange as claimed. Although the raised landing portion 1140 has a slightly angled surface, it is the examiner's position that because it is intended to mate with a flat annular region of the carrier 1120, it would have been obvious to make the shoulder flat at the top in order to make a simple flat- surface-to-flat-surface abutment seal in view of a common sense understanding of how surfaces contact one another.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-1260. The examiner can normally be reached on Monday, Tuesday and Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jan M. Ludlow
Primary Examiner
Art Unit 1797

/Jan M. Ludlow/
Primary Examiner, Art Unit 1797
June 9, 2008